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# What drives customer propensity to recommend a brand?

Jana Fiserova<sup>1</sup>, Geoff Pugh<sup>1</sup>, Chris Dimos<sup>1</sup>, Andrew Stephenson<sup>1,2</sup>

<sup>1</sup> Staffordshire University

<sup>2</sup> Lookers plc

## Abstract

This paper investigates the drivers of customer propensity to recommend a brand. DFS, a leading UK retailer, has provided Staffordshire University with access to its large data set of responses to customer satisfaction surveys. We use the Net Promoter Score methodology to differentiate between different levels of customer loyalty (i.e. “detractors”, “passive” and “promoters”). We then use a logistic regression model to determine what influences the likelihood of a customer becoming a “promoter”. We use factor analysis to reduce the large number of survey questions to a manageable number of explanatory variables. The most important factors identified are (i) satisfaction with product quality, (ii) satisfaction with the sales experience and (iii) the ability of the company to exceed customers’ expectations. We find that the law of diminishing returns applies; i.e., when average satisfaction is already high, management should expect lower returns on investment in additional improvements. In addition, we find that satisfaction is a better predictor of true loyalty than previous purchase.

## 1 Introduction

This paper reports on a collaboration between Staffordshire University and DFS<sup>1</sup> on a project, which bridges the gap between industry and academia. This project came to be because of the need for businesses to have access to sophisticated analytical tools so that they can make well-informed strategic decisions. In this article, econometric findings are interpreted in a business context. We use the large dataset collected from DFS customers to determine what drives customer propensity to recommend the brand so that management can strategically invest in improvement of the key areas that drive word-of-mouth advertising. This paper therefore aims to determine not only what makes customers recommend a brand but also how businesses can increase the chances of that happening.

## 2 Literature review

A review of existing literature on customer loyalty shows that there are many perspectives and even definitions. For instance, some studies argue that customer loyalty is a conscious behavioural response resulting from a decision-making process (Jacoby and Keyner, 1973; Huang and Yu, 1999; Kotler and Keller, 2006). On the other hand, other studies argue that consumers act through emotions and unconscious habits (Campbell, 1991; Solomon et al.,

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<sup>1</sup> DFS Furniture plc is the UK leading retailer of upholstered furniture.

2006). Yet, irrespective of the reasons for loyalty, or even definition of loyalty, there seems to be a consensus in the literature that there are degrees or levels of loyalty.

Rowley (2005) separated customers according to the level of their loyalty into four categories: *captive*, *convenience seekers*, *contended*, and *committed*. In this classification, the “committed” customer barely considers other brands and is often prepared to add value to the brand through participating in unprompted customer-to-customer recommendation. In other words, customers in this category will often engage in positive word-of-mouth exchanges. Jones et al. (1995) classified customers according to their loyalty *and* their satisfaction into four categories: *defectors*, *hostages*, *mercenaries* and *apostles*. Here, defectors and hostages are customers with low levels of satisfaction while hostages and apostles have high levels of loyalty.

Customers classified as “captive” by Rowley (2005) or “hostages” by Jones et al. (1995) are loyal because they *have to* be, not because they *want to* be. These customers will remain loyal even if their satisfaction is low, because they have no choice but to buy the product or service. We must therefore differentiate between spurious loyalty and true loyalty (Dick and Basu, 1994). True loyalty is much more than just repeat purchases as these can result from inertia, indifference or exit barriers (Wu, 2011). Customers with low satisfaction, however, are unlikely to recommend a brand even if they are loyal/regular customers. (Who would recommend to their friends and colleagues a company with which they are not satisfied?) Therefore, willingness to recommend is a better proxy for loyalty than repeat purchases, because it represents *true* loyalty.

While satisfaction has remained central to the understanding of customer loyalty, the literature has identified other contributory influences: in particular: quality and price (Oliver, 1999); perceived value and trust (Lin and Wang, 2006); and the positive influence of both interactions and the image of the brand (Boohene and Agyapng, 2011; Wong and Zhou, 2006; and Moghtar et al., 2000). Further, Dick and Basu (1994) and Szwarc (2005) suggest that satisfaction reaches a threshold level at which point loyalty suddenly increases, which supports the discrete categorisation of loyal customers (Jones et al., 1995; Rowley, 2005).

It is apparent from the literature that businesses should aim to achieve the highest level of satisfaction and loyalty from their customers. The most “committed” customers are the ones most likely to engage in active promotion of the brand by providing unprompted recommendations, which constitute word-of-mouth advertising, the holy grail of marketing (Reichheld, 2003; Rowley, 2005; Grisaffe, 2007). Word-of-mouth advertising can prove to be particularly effective, because it provides an important link to customers’ social networks and is likely to be received as credible (Shoemaker and Lewis, 1999).

Organisations have long invested in customer loyalty and satisfaction measurement to enable them to manage customer satisfaction and loyalty. However, these concepts are hard to measure, with the corollary that many of the models designed to manage customer satisfaction and loyalty are so different from one another that managers find it difficult to decide which one to use (Oliver, 1999). However, over the past decade or so, one measure has gained popularity with management in many industries. The Net Promoter Score (NPS) (Reichheld, 2003) is very simple to calculate, has face validity and an intuitive appeal to managers and other stakeholders (Brandt, 2007). Moreover, it is a comparable metric, seen as useful to investors, which companies can include in their reports.

Similar to Rowley's (2005) "four Cs", Reichheld (2003) classifies customers into *detractors*, *passives* and *promoters* based on their response to the question: 'How likely is it that you would recommend [brand] to a friend or colleague?' Customers are asked to record their answer on a scale from 0 to 10, with 0 representing 'not likely at all' and 10 being 'extremely likely'. Those who select 0-6 are classed as *detractors*, *passives* are those who select 7 or 8, and *promoters* select either of the top two scale points, 9 or 10. The Net Promoter Score is then determined by subtracting the proportion of detractors from the proportion of promoters.

Given the underlying question from which the score is derived, the NPS methodology relies on the notion that customer propensity to recommend is an indicator of loyalty. Indeed, given the findings of Dick and Basu (1994) and Jones et al. (1995), it can be argued that a customer's propensity to recommend a brand is a proxy for *true* loyalty. Accordingly, Reichheld's (2003) "promoters" are those who are most likely to recommend a brand to their friends or colleagues; i.e. they are willing to put their reputation on the line and thus can be considered as truly loyal customers.

Reichheld's (2003) work on NPS was inspired by Enterprise Rent-A-Car who simplified their efforts in measuring customer loyalty by asking only two questions: one to assess the quality of the rental experience; and one to determine whether the customer would rent from Enterprise again. This information was used to rank the relative performance of branches in the United States. The simplicity enabled almost real-time feedback on how they were doing; information which was valuable to both the company management as well as individual branches.

### **3 Methodology and Data**

#### **3.1 Methodology, hypotheses and research questions**

Although multiple-item paradigms have been described as having better reliability because they capture more information (Churchill, 1979; Baumgartner and Homburg, 1996), the current literature seems to support NPS as a single item measure from a methodological perspective, though a single item measure may require large samples to be valid (Pngitore et al., 2007; Pollack and Alexandrov, 2013). However, while using a single question to *measure* customer loyalty may be appropriate, to be able to *manage* it, a business needs information about what drives its customers to make the decision to recommend.

Drawing on the literature reviewed above, we assume that (i) customer loyalty is a conscious decision, (ii) the customer's propensity to recommend is a proxy for true loyalty, and (iii) customer satisfaction is related to customer loyalty. These assumptions suggest the following two hypotheses.

1. Our first hypothesis is that customer true loyalty (represented by unprompted recommendation) is a positive function of customer satisfaction.
2. Repeat purchase may not necessarily indicate true loyalty but can lead to spurious loyalty. Therefore, our second hypothesis is that customer satisfaction is a better predictor of customer true loyalty than repeat purchase.

Although our hypotheses are derived from theory, they are of limited use to practitioners. Only by knowing how to influence customer loyalty can a business gain more loyal

customers, and knowing where one branch is in relation to another is useful only if the branch knows what it can do to improve its position. Literature on loyalty and NPS is not yet sufficiently developed to provide a rich and unified theory capable of informing more specific hypotheses to help industry manage customer loyalty by identifying specific dimensions of customer satisfaction. Understanding such dimensions would enable the company to better use resources and predict operational challenges sooner than is currently possible. Accordingly, to get closer to business practice, we set the following research questions to guide our investigation.

1. What are the dimensions of customer satisfaction most likely to increase the likelihood of a customer becoming a promoter (i.e. becoming truly loyal) and how much do they matter?
2. How can the chances of a customer becoming a promoter be increased?

Pursuing these questions makes this research partly exploratory. Accordingly, we provide evidence from the retail upholstery market that may contribute to the development of theory on customer loyalty. DFS is a leader in every category<sup>2</sup> and every channel<sup>3</sup> of the upholstery market, so our findings can be generalised to this sector with confidence. However, more evidence is needed from other industries or even other parts of retail to develop a grounded theory that would underpin research on customer loyalty.

### 3.2 Sampling and data

In line with DFS practice, we use the NPS methodology to define promoters, i.e. customers who selected 9 or 10 on a 0-10 scale in response to the question: ‘How likely are you to recommend DFS to your friends, family and colleagues.’<sup>4</sup> DFS sends a satisfaction survey to every customer at the points of (i) purchase, (ii) delivery and (iii) 6 months later. The surveys include questions on customer satisfaction with and evaluation of several aspects of (i) the *purchase* process, such as establishing customer needs, provision of advice and reassurance, and conclusion of the sale, (ii) the *delivery* of the product, such as arrangement of the delivery, timing, the actual installation of the product and (iii) the *product* itself. The final survey is sent out six months after the purchase of the product and focuses mainly on *established customer* satisfaction with the quality of the product, perception of value for money, the overall buying experience, and expectations. All three surveys ask for demographic information such as gender, age and occupation, and what Reichheld (2006) named as “the ultimate question” – namely, the likelihood of a recommendation.

Staffordshire University has been granted access to responses to all three surveys sent to each customer between August 2014 and January 2016. The format of the questionnaire in this period was identical and, thus, the corresponding responses could be pooled. The number of observations across the three surveys is reported in

Table 1 below.

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<sup>2</sup> Quality seekers – 21% market share, value seekers – 46%, convenience seekers and bargain hunters – 22%

<sup>3</sup> Store-based market share 25%, online – 28%

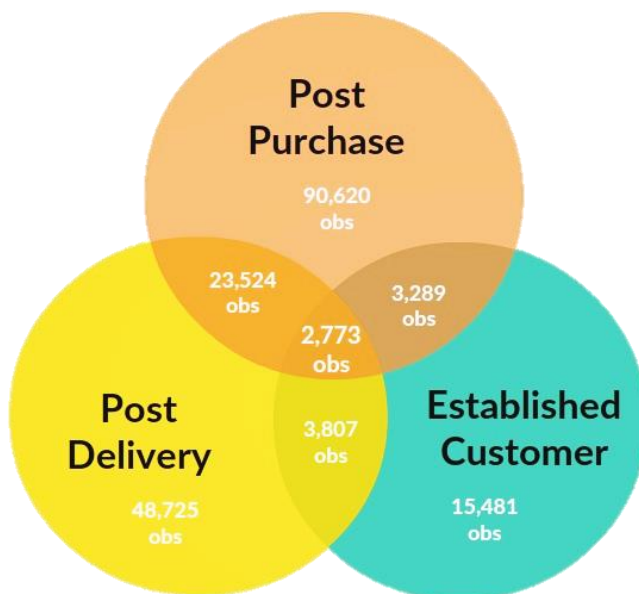
<sup>4</sup> Reichheld’s original (2003) question was modified to include ‘family’.

**Table 1. Number of observations across surveys and associated response rates**

	Total	Response rate
Post-Purchase	120,206	28%
Post-Delivery	78,829	12%
Established Customer	25,350	4.4%

Beginning with this large sample enables us to derive a balanced sample of customers responding to all three surveys, using a unique identifier (the order number). This reduces the sample size from 188,219 customer observations to 2,773 (Figure 1 illustrates this sample as the intersection of all three sets of survey responses).<sup>5</sup> The only questions included in each of the three surveys is Reichheld's (2006) "ultimate" question and that asking whether customer's expectations were exceeded. Consequently, we cannot estimate a panel model, which requires observations on each variable in every period. Instead, we use the same sample of customers to estimate separate regressions at each of the three stages of the product life-cycle. These yield directly comparable effects on customers' propensity to recommend DFS, which moreover provide internal validity checks on the estimates (e.g. by checking temporal precedence).

**Figure 1. Venn diagram – number of observations in the final sample**



## 4 Analysis

<sup>5</sup> The total of 188,219 customer observations does not sum to the total of post-purchase, post-delivery and established customer survey responses as some customers responded to two or three surveys

We use factor analysis to reduce the large number of survey questions to a manageable number of explanatory variables. The questionnaire responses correspond to 53 variables, all of which refer to narrow dimensions of customer satisfaction that potentially explain the observed variability in the propensity to recommend. We implement exploratory factor analysis to reduce these 53 dimensions to a smaller number of factors, i.e. underlying and otherwise unobservable (latent) variables identified from the observed variables. The purpose of factorisation is to be able to specify a parsimonious regression model to avoid the fog of multicollinearity associated with multiple measures of similar outcomes; and, because there are fewer of them and they are more precisely estimated, to better identify broader dimensions of customer satisfaction, which are more strategically manageable internally and more comparable externally.

However, factor analysis requires that there are no missing values for the variables to be factored. Given that there are missing values for some of our variables, the 2,773-observation sample cannot be used in its entirety. If all 53 variables were to be used, the sample size would consist of just 175 observations. Thus, we have to omit some variables in order to increase sample size. Appendix 1 reports the omitted variables along with the corresponding increase in sample size after each omission takes place. In each case, practitioner advice from DFS suggested that the omission of these variables did not entail a serious loss of information. Despite the major reduction in the sample size, the resulting 2,279 observations is still an excellent sample size for factor analysis (Comrey and Lee, 1992).

We use Principal Axis Factoring as a method of extracting factors from the original correlation matrix of the observed variables. We use non-orthogonal rotation given that orthogonal factors are more the rarity than the norm in social research. The reach of theory is not sufficient to define each factor a priori. Accordingly, the number of factors to be extracted was not restricted but determined by the standard statistical criterion (eigenvalues larger than unity). However, once extracted, each factor proved to correspond to a clear interpretation from theory and/or practitioner insight. In total, 11 factors were identified.<sup>6</sup> Factor 11 comprised two variables closely related to variables included in Factor 2; hence, it was omitted from further analysis, because it provides no additional insight. Appendix II reports the pattern matrix for the 10 factors used in the regression analysis reported below.

**Table 2** reports descriptive statistics on each of these 10 factors. Factors 1, 3-8 and 10 enter the dataset for each observation as weighted factor scores, where the weights are the corresponding loadings.<sup>7</sup> Conversely, Factors 2 and 9 are recorded as Bartlett factor scores.

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<sup>6</sup> The Kaiser-Meyer-Olkin measure of sampling adequacy (.947) is satisfactory. Moreover, the null hypothesis that the correlation matrix is an identity matrix is rejected at the 1% level according to the Bartlett's test of sphericity.

<sup>7</sup> For each factor, the loading-weighted factor score ( $FS$ ) for each observation  $i$  is calculated as follows:  $FS_i = \frac{\sum (loading_m * likert\_score_{im})}{\sum loading_m}$ , where  $i=1, \dots, 2,055$  observations and  $m$  indexes the variables within each factor.

Since the underlying variables that constitute these two factors are not consistent when it comes to units of measurement, they are standardised as standard deviation units.

**Table 2. Descriptive statistics of variables**

Variable	Mean	Standard deviation	Min	Max
<b>Dependent variables</b>				
pp_promoters	.8184915	.3855328	0	1
pd_promoters	.7542579	.4306311	0	1
ec_promoters	.66618	.4716911	0	1
<b>Control variables</b>				
region_north	.5600973	.496496	0	1
pp_15_16	.0301703	.1710974	0	1
pd_15_16	.1026764	.3036096	0	1
ec_15_16	.5493917	.4976756	0	1
received_recommendation	.1221411	.3275284	0	1
previous_purchase	.3858881	.4869228	0	1
customer_male	.4068127	.4913589	0	1
salesperson_male	.7849148	.4109814	0	1
<b>Age</b>				
Up to 24	.0150852	.1219214	0	1
25-34	.1109489	.3141453	0	1
35-44	.1552311	.362213	0	1
45-54	.2437956	.4294753	0	1
55-64	.2666667	.4423243	0	1
65+	.2082725	.4061716	0	1
<b>Socio-economic status</b>				
High	.296837	.4569753	0	1
Middle	.2997567	.4582628	0	1
Low	.1309002	.3373733	0	1
Student	.0029197	.0539685	0	1
No-income	.0277372	.1642589	0	1
Retired	.1085158	.3111065	0	1
N/A - prefer not to answer	.1333333	.3400174	0	1
<b>Factors</b>				
Factor 1: Sales basics	9.515188	.9705012	0	10
Factor 2: Product rating – Established customer	.0079229	1.019949	-4.10093	1.10237
Factor 3: Delivery-planning Staff	9.011059	1.898361	0	10
Factor 4: Delivery staff	9.583551	1.117653	0	10



Factor 5: Salesperson – established needs	.8008787	.2819404	0	1
Factor 6: Product rating - Delivery	4.435138	.6790029	1	5
Factor 7: Employee exceeded expectations	.5069351	.3884686	0	1
Factor 8: Salesperson – advice and reassurance	4.78504	.4369165	1	5
Factor 9: Delivery progress and timing	.017609	1.180354	-6.8081	3.78579
Factor 10: Salesperson – careful listener	.9776156	.1479663	0	1

We used logistic regression to model the relationship between the likelihood of becoming a promoter and variables anticipated to affect it. The dependent variable in each of our three regressions – one for each survey (i.e. post-purchase – PP, post-delivery – PD, and established customer – EC) – indicates whether or not the customer is a promoter (promoter=1; otherwise 0). The explanatory variables of most interest are the 10 identified factors. In addition to the factors, we explore the effects of region (North=1; South=0), previous purchase (customer purchased from DFS before=1; otherwise 0), received recommendation (customer received recommendation=1; otherwise 0), gender of the customer (male=1) and gender of the sales person (male=1). The difference between the 2,055 observations in the regression sample and the 2,279 entering factor analysis is accounted for by missing observations on customer demographics or, in a few cases, the gender of the salesperson. The findings of the logistic regression are presented in **Error! Reference source not found..**

**Table 3. Logistic regression – marginal effects**

INDEPENDENT VARIABLES	DEPENDENT VARIABLES		
	PP - PROMOTERS	PD - PROMOTERS	EC - PROMOTERS
Factor 1 Sales basics	0.114*** (0.0158)	0.0733*** (0.0178)	0.137*** (0.0276)
Factor 2 Product rating (EC)	-0.00251 (0.00845)	0.0115 (0.0113)	0.334*** (0.0262)
Factor 3 Delivery planning – staff	0.00737* (0.00423)	0.0378*** (0.00725)	0.0431*** (0.0102)
Factor 4 Delivery staff	0.00416 (0.00653)	0.0968*** (0.0198)	0.0290 (0.0193)
Factor 5 Salesperson – established needs	0.0794*** (0.0275)	0.0186 (0.0430)	-0.0616 (0.0615)
Factor 6 Product rating (PD)	0.0144 (0.0124)	0.178*** (0.0212)	0.0700*** (0.0267)
Factor 7 Employee exceeded customer’s expectations	0.0651*** (0.0224)	0.130*** (0.0286)	0.210*** (0.0393)
Factor 8 Salesperson – advice and reassurance	0.112*** (0.0221)	0.0488 (0.0312)	0.0744 (0.0502)
Factor 9 Delivery progress and timing	0.00591 (0.00586)	0.0796*** (0.0108)	0.0328** (0.0136)
Factor 10	-0.107* (0.0586)	-0.134 (0.0615)	-0.189 (0.0615)

Salesperson – careful listener	(0.0648)	(0.0832)	(0.116)
region_north	-0.00268 (0.0156)	-0.0146 (0.0209)	-0.00452 (0.0282)
received recommendation	0.0781*** (0.0170)	-0.0349 (0.0375)	0.114*** (0.0399)
customer_male	-0.0536*** (0.0173)	-0.101*** (0.0229)	-0.0986*** (0.0312)
previous purchase	0.0286* (0.0159)	0.0334 (0.0214)	0.0575** (0.0289)
salesperson_male	-0.0105 (0.0195)	0.0270 (0.0275)	0.0500 (0.0347)
age_0	0.0839 (0.0660)	0.0437 (0.0741)	0.0906 (0.126)
age_1	-0.0314 (0.0285)	0.127*** (0.0483)	0.0517 (0.0518)
age_2	0.0142 (0.0272)	-0.0163 (0.0346)	0.0199 (0.0446)
age_3	-0.0187 (0.0221)	-0.0527* (0.0277)	0.0130 (0.0400)
age_5	-0.0268 (0.0255)	0.0157 (0.0306)	0.00608 (0.0424)
nssec_high	-0.0269 (0.0268)	0.0332 (0.0308)	-0.0201 (0.0477)
nssec_middle	-0.0111 (0.0256)	0.0450 (0.0309)	-0.0148 (0.0473)
nssec_low	0.00106 (0.0303)	0.0809** (0.0387)	0.0400 (0.0564)
nssec_student	-0.191*** (0.0680)	-0.0956 (0.142)	0.242 (0.186)
nssec_no_income	0.0310 (0.0507)	0.113 (0.0739)	0.0633 (0.107)
nssec_retired	0.0149 (0.0373)	0.0494 (0.0399)	0.0567 (0.0607)
pp_15_16	-0.0519 (0.0375)		
pd_15_16		-0.0313 (0.0310)	
ec_15_16			-0.0600** (0.0292)
Observations	2,055	2,055	2,055

All 10 factor variables are related to measurements of customer satisfaction. The marginal effects of those factors estimated with statistical significance – at either the 0.01 or 0.05 levels - all have the expected positive sign. Qualitatively, therefore, these findings are consistent with Hypothesis 1; namely, the more satisfied are the customers the more likely they are to become promoters.

Factor 1 captures the “sales basics”, i.e. all the core processes related to the purchase experience: understanding customers’ requirements; providing advice regarding product

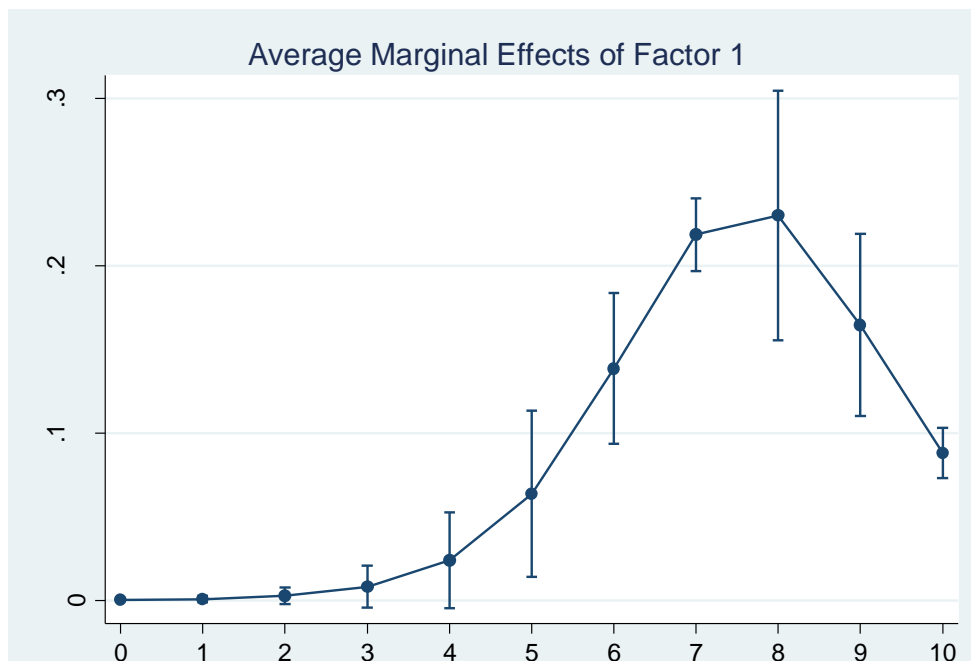
features, guarantees, protection and delivery; and the conclusion of the sales transaction. The highly significant positive marginal effect indicates that these “sales basics” matter a great deal to the customer propensity to recommend DFS. The effect of this factor is long-lasting and makes a difference at all three points of the early stage of the product life-cycle (i.e. post-purchase, post-delivery and approximately 6 months after the product purchase). Establishing customers’ needs, providing advice and correct information, and valuing their custom matters to customers not only at the point of purchase but is also remembered at the point of delivery and even more so six months later.

Quantitatively, we can provide an indicative interpretation, taking into account that (i) the change we consider in Factor 1 is too large to be strictly marginal, that (ii) the effect pertains only at the mean values of both Factor 1 and all the other variables in the model, and, in particular, that (iii) in the context of a logistic (i.e. a non-linear) model the indicated effect would be smaller at higher levels of Factor 1. With these caveats, the estimated marginal effect at the time of purchase indicates that an increase in the rating of the component variables sufficient to yield an overall one point increase in Factor 1 (measured on a 0-10 scale) would increase the probability of a customer becoming a promoter by 11.4 percentage points. In other words, an additional 11 customers out of every 100 customers would become promoters if the average satisfaction recorded by the elements of the “sales basics” factor were to increase by one unit. Moreover, Factor 1 effects, which are measured at the point of purchase, persist; improved satisfaction with the “sales basics” by one scale point at the time of purchase results in almost 14 more customers becoming promoters 6 months after the sale has been completed. This suggests that satisfaction with the sales experience determines customers’ propensity to recommend long after the sale is concluded.

More precise quantitative estimates are obtained using Stata’s *margins* commands and the corresponding *marginsplot* presented in

Figure 2. Here we present the marginal effects of Factor 1 at different values over the mean values of all other variables. For each category of Factor 1, we can read off the marginal effect on the dependent variable. At low levels of Factor 1 – i.e. poor satisfaction with the sales experience – the effects of improvement are very limited (near zero and not statistically significant, with the 95% confidence intervals crossing zero). Conversely, at medium levels of Factor 1 (good but not excellent sales experience) the effect of marginal improvement is substantial, while at high levels of Factor 1, as we expect in a non-linear model, the marginal effects are subject to sharply diminishing returns. This shows that management can expect little return on additional investment in the improvement of customer satisfaction with the sales experience when the average satisfaction is already very high.

**Figure 2. Average marginal effects of the “sales basics” factor at each scale point on the likelihood of a customer becoming a promoter post purchase**

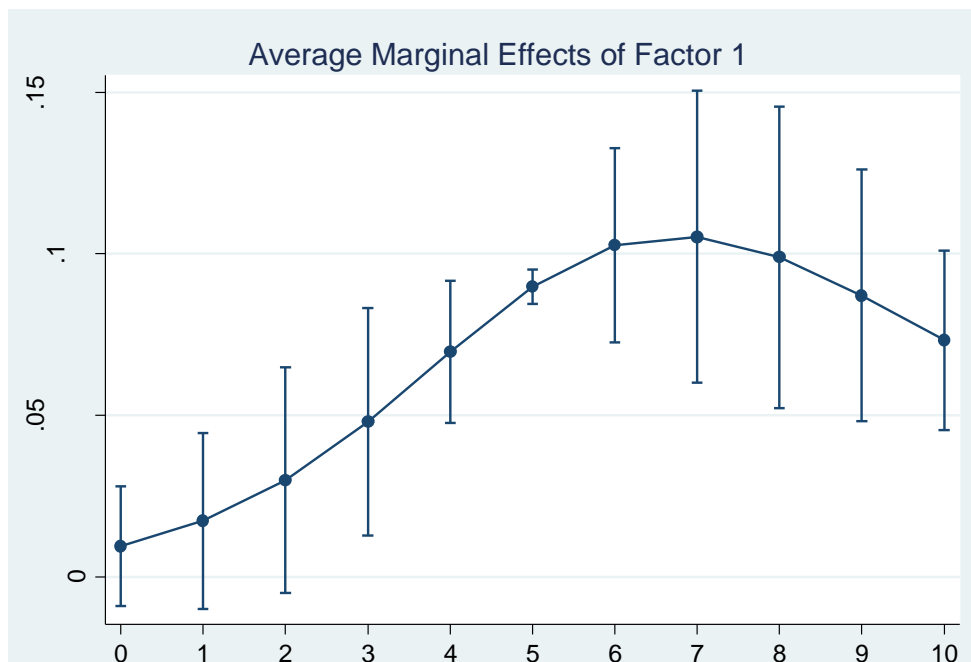


The same pattern of marginal effects is revealed at the post-delivery stage, albeit with systematically lower values. Likewise, for the established customer stage,

Figure 3 largely replicates both the pattern of rising and then diminishing returns revealed by

Figure 2 for the post-purchase stage. Although, with time, the effects are somewhat attenuated they are by no means eliminated.

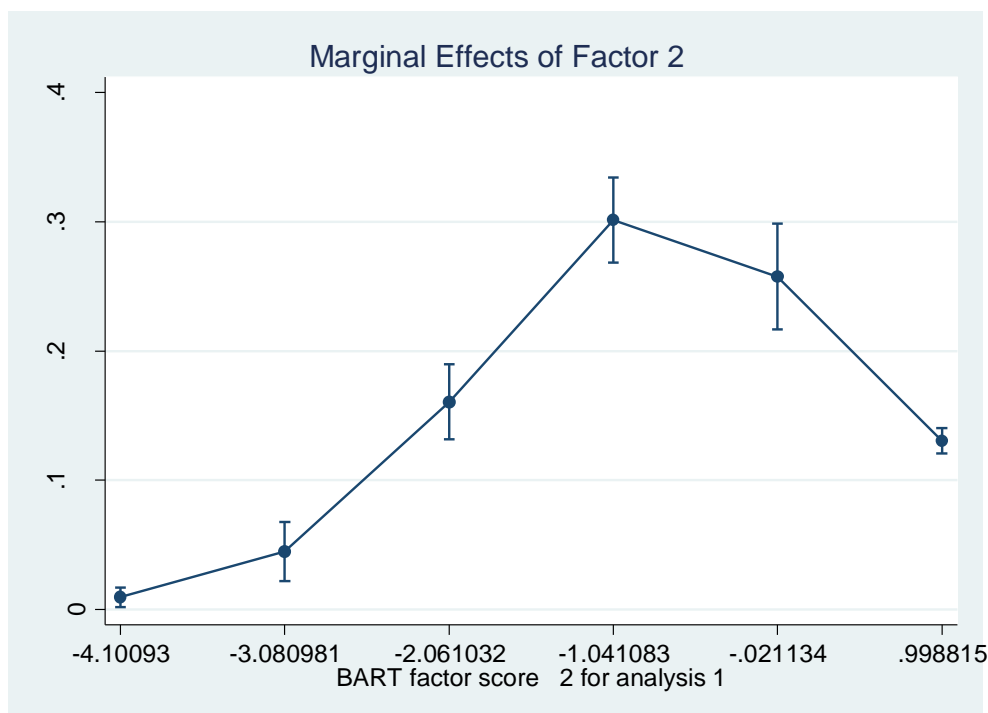
**Figure 3. Marginal effects of Factor 1 on the likelihood of an established customer becoming a promoter**



Another influential factor (Factor 2) is related to the quality of the product evaluated by established customers; i.e. this captures customer satisfaction with the product after the customer has had the opportunity to use it for at least six months. The results suggest that if the average value of the underlying factor increases by one standard deviation, there will be 33.4 percentage points more promoters amongst the company's customers. A one standard deviation change is however very large (certainly too large to be regarded as a marginal change). Nonetheless, this estimated effect does suggest that if DFS could increase satisfaction with the quality-related variables in Factor 2 from the sample mean response to near the sample maximum it could reap a substantial increase in the number of promoters. In contrast, the effect of a one standard deviation increase in Factor 9 (factor related to delivery process) – with its component variables transformed in the same manner as in Factor 2 – is an order of magnitude smaller. This shows that increased satisfaction with the product quality will have a much larger effect on the likelihood of a customer becoming a promoter than the same improvement in satisfaction with the delivery process.

We use the *margins* and *marginsplots* commands to show the range of marginal effects of Factor 2 (at one standard deviation increments from the minimum value). Again, we see the pattern of first rising and then diminishing returns to positive changes of a given size as the level of Factor 2 approaches its maximum.

**Figure 4. Marginal effects of Factor 2 (product quality) on the likelihood of an established customer becoming a promoter**



The insignificant coefficients associated with Factor 2 at the post-purchase and post-delivery stage (Table 3) are to be expected, as the questions related to the factor are asked at the established customer phase (something that will have occurred in the future cannot be a

predictor of something that has happened in the past; this is an example of the temporal precedence principle referred to above). Questions about the product quality are asked already at the post-delivery phase<sup>8</sup> (captured by Factor 6) when the customer has had up to four weeks<sup>9</sup> with the product. The marginal effect of the product quality related factor (Factor 6) presented in Table 3 shows that customer satisfaction with the product has the largest effect on the likelihood of a customer becoming a promoter at the post-delivery stage. In other words, the thing that matters the most at the delivery stage is the product itself.

Another interesting finding is the importance of exceeding customers' expectations, which is captured by Factor 7. Factor 7 is exclusively related to exceeding expectations at each of three touch points and is independent of any other aspect of the sales experience. Not only is the factor important at each of the three stages but the results show that its importance increases through time. This suggests that exceeding customers' expectations is something customers remember for a long time. Indeed, the size of the effect more than triples between the post-purchase (0.0651) and the established customer phase (0.210).

The delivery of the product (captured by Factor 4) has been found to have a significant effect on the likelihood of a customer becoming a promoter but only at the delivery stage.<sup>10</sup> This suggests that while delivery matters at the time, it has no significantly lasting effect on the customer's propensity to recommend the company.

We find no systematic variations by either age or socio-economic status.<sup>11</sup> Gender of the customer, however, is highly significant with men being a lot less likely to become promoters of DFS among their friends, family and colleagues at all three touch points. This is not necessarily unexpected given the nature of the product. However, it would be interesting to explore if it truly is the nature of the product that affects the willingness to recommend a company or if in other industries, e.g. automotive, men would be just as/more likely to be promoters of a company as/than women. It is noteworthy that gender of the sales person has no statistically significant effect on the likelihood of a customer becoming a promoter.

Another interesting finding relates to received recommendation and previous purchase. Does the fact that a customer bought before mean that he/she will be a promoter of the brand? It seems to make a difference at the Established Customer stage (increasing the likelihood of becoming a promoter by almost 6pp). Previous purchase therefore has some effect on true loyalty as it makes a difference long after the sale was concluded. However, receiving a recommendation has a stronger effect on customers becoming promoters themselves. Having received a recommendation adds more than 7pp to the proportion of promoters at the post-purchase stage with the effect increasing by approximately a half six months later, resulting

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<sup>8</sup> There is of course no point in asking about the product quality at the post-purchase phase, as the customer has not had their product delivered and thus did not have the opportunity to test and use it.

<sup>9</sup> The customer post-delivery survey remains live for four weeks.

<sup>10</sup> Every product is made to order and delivered to every customer. It is not possible for a customer to pick up the product.

<sup>11</sup> In one case, there is a reason for an exceptional statistically significant effect, indicating that students are less likely to promote DFS. This is not surprising, as it is the DFS strategic decision not to cater for this particular market segment, as they require cheap products delivered fast. Since DFS makes all their products to order, which takes up to 10 weeks to complete, students are unlikely to be satisfied and thus unlikely to recommend DFS to their friends and colleagues.

in more than 11 more promoters for every 100 customers. It is apparent that those who come because of a recommendation are more likely to recommend the company themselves.

Finally, we have only limited evidence consistent with Hypothesis 2, although none of our findings contradicts it. Of the satisfaction factors revealing statistically significant effects, only Factor 7 comprises variables measured in the same way as Previous Purchase (i.e. as binary variables). The resulting comparison – a marginal effect of 0.210 for “exceeding expectations” and 0.058 for Previous Purchase – suggests that customer satisfaction is a better predictor of true loyalty than repeat purchase. However, the other statistically significant satisfaction factors comprise continuous variables and so their effects are not directly comparable with the effect of Previous Purchase.

## 5 Conclusions

Results of the logistic regression, which we used to model the relationship between the likelihood of becoming a promoter and the explanatory variables, show that the more satisfied are the customers, the more likely they are to become promoters. Our findings therefore support the hypothesis that true customer loyalty is a positive function of satisfaction. Moreover, we have found some evidence to support our second hypothesis that the effect of customer satisfaction is larger than the effect of previous purchase; namely, the likelihood of a customer becoming a promoter increases more when a customer’s expectations are exceeded than as a result of previous purchase.

To make this study relevant to practitioners, our research questions focus on the drivers of customer true loyalty, their respective importance, and what companies can do to increase the likelihood of their customers becoming the company’s promoters. We find that the dimensions of customer satisfaction most likely to increase the likelihood of a customer becoming a promoter are: the sales basics; product quality; and exceeding customers’ expectations.

*Getting the basic sales techniques right*, and thus increasing customer satisfaction with the sales experience, significantly affects the likelihood of a customer becoming a promoter. In fact, the effect becomes stronger through time, leading us to conclude that satisfaction with the sales experience influences customer propensity to recommend long after the sales transaction has been completed. Further, the size of the estimated marginal effects is not the same at each value of the factors. We observe low marginal effects at low values of satisfaction scores and large effects in the mid to high satisfaction values. However, at very high satisfaction values the marginal effects start to decrease, demonstrating diminishing returns. This means that when customer satisfaction is already high, management should expect smaller returns (in terms of increased proportion of promoters in their customer base) to investment in additional improvements in the underlying factor.

Another important factor that influences the dependent variable is *satisfaction with product quality*. In fact, the importance of product quality is so high that even at the delivery stage, when customers evaluate all aspects of delivery, it is the product itself that has the largest effect on the likelihood of a customer becoming a promoter. Indeed, while the delivery process itself matters, it has no significant lasting effect on customer propensity to recommend the company.

*Exceeding customers' expectations* has been found to have a strong and lasting effect on customers becoming promoters. In addition, customers who have been recommended to the business by their social networks are more likely to become promoters themselves. Therefore, if businesses get their product right, implement basic sales techniques to deliver great sales experience, and exceed customers' expectations, customers will reward them with glowing recommendations, which in turn will attract more promoters, thereby creating a multiplier effect sustaining the word-of-mouth advertising, the holy grail of marketing.

In relation to the dimensions of customer satisfaction, our research questions also asked how much they matter with respect to true customer loyalty. Both the "sales basics" (Factor 1) and the product quality (Factor 2) comprise continuous variables and, at the factor level, their marginal effects are comparable (pertaining to unit changes of one in the case of Factor 1 and normalised standard deviation units in the case of Factor 2 which are very close to one). Hence, we may conclude that the marginal effect of product quality on established customers' true loyalty (0.334) is substantially larger than the marginal effect of "sales basics" (0.137), although both are clearly important. Direct comparison with "exceeding expectations" (Factor 7) is not possible, because the component variables are binary. Nevertheless, exceeding customers' expectations compared to not doing so leads to a 21pp increase in promoters among established customers.

This research provides evidence on drivers of true customer loyalty using the Net Promoter methodology and consequently contributes to an under-researched area in the academic literature. Irrespective of the academic debate on the appropriateness of the NPS metric (Keiningham et al., 2005, Keiningham et al., 2007), it has been widely adopted by industry. Findings of this research are therefore very useful to practitioners; firstly, they enable companies to invest scarce resources strategically into areas of customer satisfaction, which will yield the greatest return on investment in terms of increased true customer loyalty and word-of-mouth advertising. Secondly, being able to grow the metric itself is of significant importance as it is reported to analysts and investors and used to value companies externally and to rank branches internally.

Whilst we can confidently generalise our findings to the upholstery industry, given that DFS is the market leader in that sector, we cannot do so for other parts of retail or other industries. Opportunities for future research therefore arise in two main areas. Firstly, we propose to replicate this research in other parts of retail and other industries to develop a rich evidence base for further theory development. Secondly, these findings (i.e. drivers of NPS) will be particularly useful if we can demonstrate that NPS actually does predict sales growth, as argued by Reichheld (2003). That way companies can relate day-to-day activities to sales growth and calculate a more accurate return on investment, which is particularly important for shareholders.

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**Appendix I. Omitted variables and factor analysis sample size**

Variables used	Missing values (%)	Number of observations
All 53 variables	-	175
“Overall, how satisfied were you with the ease in which you were able to speak to someone in store who was able to help you with your query?”	71.9%	671
“If the Sales Person pro-actively suggested a product, did you feel this was suitable for your needs?”	63.3%	1,492
“How satisfied were you that you were given good, impartial advice of the finance options, so you made the right choice for you?”	21.8%	1,645
“How satisfied were you with the manner in which the DFS Sales Person explained: Payment Options/Interest Free Credit”	16.6%	1,837
“How satisfied were you with the manner in which the DFS Sales Person explained: Explanation of additional items e.g. gliders, reclining options”	12.5%	1,988
“How satisfied were you with the manner in which the DFS Sales Person explained: The expertise DFS has in manufacturing their own sofas”	11.1%	2,086
“How satisfied were you with the manner in which the DFS Sales Person explained: The range of sofa sizes, fabric and colour options available”	10.9%	2,279

## Appendix II. The 10 factors identified for regression analysis

Pattern Matrix <sup>a</sup>											
	Factor										
	1	2	3	4	5	6	7	8	9	10	11
<b>1. Sales basics</b>											
1.1. conclude_satisfaction_clarity_info_procedure	.863										
1.2. advicereassurance_satisfaction_salesperson_product_guarantees_explained	.773										
1.3. advicereassurance_satisfaction_salesperson_product_protection_explained	.764										
1.4. advicereassurance_satisfaction_salesperson_delivery_installation_explained	.725										
1.5. conclude_satisfaction_time_complete_transaction	.722										
1.6. conclude_satisfaction_custom_valued	.715										
1.7. advicereassurance_features_sofa_explained	.632										
1.8. conclude_satisfaction_salesperson_asked_order	.618										
1.9. establishneeds_salesperson_understood_requirements	.571										
1.10. likelihood of recommendation to friends, family, colleagues etc.	.559										
<b>2. Product rating (established customer stage)</b>											
2.1. sofa_rating_build_quality		-.912									
2.2. sofa_rating_expectations		-.787									
2.3. satisfaction_overall_buying_ordering_delivery_sofa		-.757									
2.4. sofa_rating_comfort		-.756									
2.5. sofa_rating_value_for_money		-.697									
2.6. satisfaction_salesperson_accurate_info		-.491									
2.7. product_issues_since_delivery		.487									
<b>3. Delivery planning</b>											
3.1. satisfaction_staff_helpfulness			.988								
3.2. satisfaction_staff_friendliness			.945								

3.3. satisfaction_explanation_delivery_process			.806							
3.4. satisfaction_amount_notice_given			.685							
3.5. satisfaction_convenience_delivery_time			.637							
<b>4. Delivery staff</b>										
4.1. satisfaction_staff_care_furniture			.819							
4.2. satisfaction_staff_tidiness			.808							
4.3. satisfaction_staff_politeness_manners			.724							
4.4. satisfaction_staff_placing_sofa			.703							
<b>5. Salesperson – established needs</b>										
5.1. establishneeds_salesperson_planned_usage				.713						
5.2. establishneeds_salesperson_size_furniture				.700						
5.3. establishneeds_salesperson_currentfurniture_stylecolourpreference				.645						
5.4. establishneeds_salesperson_budget_finance				.512						
5.5. establishneeds_salesperson_clarify_summarise_needs				.484						
5.6. relationship_time_to_serve										
<b>6. Product rating (post-delivery stage)</b>										
6.1. sofa_rating_build_quality					-.856					
6.2. sofa_rating_appearance					-.782					
6.3. sofa_rating_comfort					-.635					
6.4. sofa_rating_expectations					-.554					
<b>7. Employee exceeded expectations</b>										
7.1. employee_exceeded_expectations						.731				
7.2. employee_exceeded_expectations						.645				
7.3. employee_exceeded_expectations						.512				
<b>8. Salesperson – advice and reassurance</b>										
8.1. advicereassurance_product_knowledge							.852			
8.2. advicereassurance_staff_rating_answering_questions							.832			

8.3. adviceassurance_friendliness_helpfulness								.785			
8.4. adviceassurance_passion_enthusiasm								.751			
8.5. adviceassurance_staff_rating_building_report								.706			
<b>9. Delivery progress and timing</b>											
9.1. satisfaction_updated_order_progress									.549		
9.2. arrival_within_timescale_salesperson									.517		
9.3. satisfaction_overall									.439		
<b>10. Salesperson – careful listener</b>											
10.1. establishneeds_salesperson_listen_carefully										.457	
<p>Extraction Method: Principal Axis Factoring.</p> <p>Rotation Method: Oblimin with Kaiser Normalization.</p> <p>a. Rotation converged in 11 iterations.</p>											